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MEMORANDUM

TO: Paul La Courreye, EPA

FROM: Bill Malloch, Ecology and Environment, Inc. *m/m*

Date: August 24, 1987

Subject: Review of the Preliminary Assessment (PA) for the Carson River Mercury Site (CRM) Prepared by Lorraine Bruce and Martha McDonnell, Contractors to the State of Nevada, Dated December 1985.

EPA ID #: NVD980813646

cc: Martha Walters, Ecology and Environment, Inc.

Summary:

Carson River Mercury Site (CRM) is a 10 mile section of the Carson River in Lyon County stretching from Deer Run Road near Carson City to the city of Dayton, Nevada. From 1865 to 1895 18 mills, located on the banks of the Carson River, processed an average of 100 tons of gold ore per day using mercury for the amalgamation process. An estimated 15 million pounds of mercury escaped the mill process during operation and were either incorporated into the tailings or ~~was~~ discharged directly into the Carson River. The operative status of the site from 1895 to 1987 is unknown.

Many investigations of this site have been performed and have shown mercury levels up to 200 times the background levels in downstream sediments. Levels of total mercury have exceeded the FDA 1 ug/gm action level in approximately 70% of the commercial carp captured from the Lahonton Reservoir located approximately 5 miles downstream from Deer Run Road.

A groundwater investigation in 1973 involved sampling of 36 wells in the Carson and Truckee River basins. All samples, including wells located adjacent to mercury enriched soil, had concentrations of mercury less than 1 ug/l.

The Nevada Department of Environmental Protection (NDEP) has

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performed ongoing Site Inspections from 1983-1984. Currently, NDEP is continuing its sampling program and examining possible mitigation measures; however, NDEP may not have the resources for complete remedial action (Telephone conversation, Wendell McCurry, NDEP, July 30, 1987).

RCRA Status:

CRM has no RCRA permits on file with the EPA as of 07/28/87.

HRS Factors:

The Lahonton Reservoir, located approximately 5 miles downstream, is used for recreational purposes as well as for fishing. Additionally, it is considered a potential drinking water source by NDEP. The possibility for CRM to score above 28.5 on the HRS model is high.

Recommendations/Justifications:

The 1985 PA that addressed activities on-site recommended further investigation and possible mitigation measures. Additionally, it recommended an evaluation of the commercial sale of carp from the reservoir.

Due to the large area which the site encompasses and the high potential for adverse health effects from the mercury contamination, FIT recommends scoring the site using the Hazard Rank System model to determine its potential for inclusion on the National Priorities List. Further investigations at CRM should be coordinated with Jim Cooper of the NDEP.

Site will be scored using the revised HRS model in 1988.

Paul La Courreye

9.16.87